Wortman, Eric

From: Ohlhausen, Natalie <Natalie.Ohlhausen@anadarko.com>
Sent: Thursday, December 7, 2017 4:24 PM
To: Wortman, Eric
Cc: Smith, Claudia
Subject: RE: Syn Minor NSR Permit Applications - Multiple Facilities on U&O Reservation

Eric,

I provided responses in blue below. Please let me know if you have any questions.

Thank you,

Natalie Ohlhausen
Direct: 720-929-6498
Mobile: 281-785-8929

From: Wortman, Eric [mailto:Wortman.Eric@epa.gov]
Sent: Friday, December 01, 2017 12:18 PM
To: Ohlhausen, Natalie <Natalie.Ohlhausen@anadarko.com>
Cc: Smith, Claudia <Smith.Claudia@epa.gov>
Subject: Syn Minor NSR Permit Applications - Multiple Facilities on U&O Reservation

Hi Natalie,

In addition to questions I sent you on 11/15 for the Sage Grouse CS syn minor permit application, I have reviewed the permit applications for several other actions and have a few questions. It would be great to get these sometime next week if possible, but no later than Friday, December 15th. Once I have this information, I can finalize the proposed permits and start preparing for public notice. I can be reached via email or at 617-918-1624 with any questions. Thanks. -Eric

Bitter Creek Compressor Station

- Appendix D of your application does not propose any VOC requirements for the two low-emission dehydrators at the facility. I assume you want the permit to include the enforceable restrictions for the two dehydrators at the facility (similar to White River and the CD). Please verify. – The dehy details were excluded in error. We do need enforceable restrictions for the two low emission dehys at Bitter Creek. I have attached the calculation pages for those units. Please let me know I you need more information.
- Please provide the MMscfd capacity for each of the dehydrators. The application did not include the emissions unit detail sheets for the two dehydrators. Each dehy is 70 MMscf
- The application indicates there are six H2S air strippers at the facility. Please send me a sentence or two about how these units fit in to the facility operations that I can include in the process description. Please verify that there are no emissions associated with these units (nothing in PTE tables). Bitter Creek compressor station has six gas to liquid H2S scrubbers. Each scrubber consists of a vertical vessel where gas is introduced to a H2S scavenger liquid that removes H2S from the gas stream prior to it being sent to the a gas plant. There is no PTE associated with these scrubbers.
- Please provide the capacity of the three condensate/produced water tanks. The tank size is not in the application. Additionally, the process description states that condensate is sent to the blowcase system and injected into the discharge line, but also states condensate is stored in the produced water tanks. Also, the facility diagram for the facility indicates there are 3 produced water tanks and 3 liquids storage tanks (six total

tanks). Can you clarify the liquids storage operations at the facility? Bitter Creek compressor station has 3 400bbl condensate storage tanks. Additionally, there is a blowcase system that allows low pressure condensate to be pressurized and injected into a pipeline. Condensate can either be stored or sent through the blowcase.

North East Compressor Station

- Please provide the capacity of the 2 condensate/produced water tanks. The tank size is not in the application. Each tank is 400bbl

North Compressor Station

- Please provide the capacity of the 2 condensate/produced water tanks. The tank size is not in the application. Additionally, the process description states that condensate is sent to the blowcase system and injected into the discharge line, but also states it is stored in the produced water tanks. Please clarify this discrepancy. – Each tank is 400bbl. Similar to the Bitter Creek station, North station has both condensate tanks and a blowcase system. Condensate can be stored or sent through the blowcase.

Archie Bench Compressor Station

- Please provide the capacity of the three condensate/produced water tanks. The tank size is not in the application. Additionally, the process description states that condensate is sent to the blowcase system and injected into the discharge line, but also states it is stored in the produced water tanks. Please clarify this discrepancy. – Archie bench has (1) 400bbl and (2) 300bbl condensate tanks. Similar to the Bitter Creek station, Archie Bench station has both condensate tanks and a blowcase system. Condensate can be stored or sent through the blowcase.
- The application indicates there are three H2S air strippers at the facility. Please send me a sentence or two about how these units fit in to the facility operations that I can include in the process description. Please verify that there are no emissions associated with these units (nothing in PTE tables). Archie Bench compressor station has three gas to liquid H2S scrubbers. Each scrubber consists of a vertical vessel where gas is introduced to a H2S scavenger liquid that removes H2S from the gas stream prior to it being sent to the a gas plant. There is no PTE associated with these scrubbers.

Sage Grouse (requested on 11/15)

- The application request a CO control requirement of 93% for engine SGG Gen 3 in accordance with the consent decree. However, this engine is only 125 hp and therefore doesn't appear to subject to the consent decree requirements in paragraph 41 and 50 for engines > 500 hp. The application also states this engine is subject to NSPS JJJJ. Please verify you are requesting the same control requirements (oxidation catalyst with 93% reduction) for SGG Gen 3 as the other 5 engines. – The generator is applicable to NSPS JJJJ so it should not have the same requirements as the 5 compressor engines at the facility.
- Please provide the capacity of the 3 condensate/produced water tanks. The tank size is not in the application. Each tank is 400bbl
- The application indicates there are three H2S air strippers at the facility. Please send me a sentence or two about how these units fit in to the facility operations that I can include in the process description. Please verify that there are no emissions associated with these units (nothing in PTE tables). Sage Grouse compressor station has three gas to liquid H2S scrubbers. Each scrubber consists of a vertical vessel where gas is introduced to a H2S scavenger liquid that removes H2S from the gas stream prior to it being sent to the a gas plant. There is no PTE associated with these scrubbers.

From: Wortman, Eric
Sent: Wednesday, November 15, 2017 11:32 AM
To: 'natalie.ohlhausen@anadarko.com' <natalie.ohlhausen@anadarko.com>
Cc: Smith, Claudia <Smith.Claudia@epa.gov>
Subject: Syn Minor NSR Permit - Sage Grouse CS

Hi Natalie,

I've reviewed the synthetic minor permit application for the Sage Grouse CS and have a few questions. Thanks – Eric

1. The application request a CO control requirement of 93% for engine SGG Gen 3 in accordance with the consent decree. However, this engine is only 125 hp and therefore doesn't appear to subject to the consent decree requirements in paragraph 41 and 50 for engines > 500 hp. The application also states this engine is subject to NSPS JJJJ. Please verify you are requesting the same control requirements (oxidation catalyst with 93% reduction) for SGG Gen 3 as the other 5 engines.

2. Please provide the capacity of the 3 condensate/produced water tanks. The tank size is not in the application.

3. The application indicates there are three H2S air strippers at the facility. Please send me a sentence or two about how these units fit in to the facility operations that I can include in the process description. Please verify that there are no emissions associated with these units (nothing in PTE tables).

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Eric Wortman | Environmental Scientist
U.S. Environmental Protection Agency
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